

Vacuum coating system for coating elongate substrates

Patent claims

1. Vacuum coating system for coating elongate substrates, said coating system having one or several coating sections and one or several pump sections, at least one magnetron in an arrangement as a sputter-down-variant above the substrate, said variant having a target surface opposite the upper side of the substrate and/or comprising an arrangement as a sputter-up-variant below the substrate, said variant having a target surface opposite the lower side of the substrate and a transport device, characterized in that the transport device (9) is arranged in a divided manner on a drive plane (10) and on a transport plane (11), the drive plane (10) being arranged in such a manner that in the sputter-up variant, the underside of a magnetron body containing the magnetron (4) lies above the drive plane (10).
2. Vacuum coating system according to claim 1, characterized in that transport elements of the transport plane (11) can be disconnected from the drive system and removed if required.
3. Vacuum coating system according to one of claims 1 or 2, characterized in that, in an arrangement as a sputter-up variant, the magnetron (4) is connected to fastening elements that laterally extend from the top of the vacuum coating system (1) alongside the substrate (5) as far as the magnetron body.
4. Vacuum coating system according to one of claims 1 to 3, characterized in that drive elements of the drive plane (10) are encased in such a way that the casing acts as flow resistance.
5. Vacuum coating system according to one of claims 1 to 4, characterized in that mutually corresponding suction openings are arranged in the coating section (3, 8) and the pump section (2) above and below the transport plane (11).
6. Vacuum coating system according to one of claims 1 to 5, characterized in that a vacuum pump (18) is arranged below the transport plane (11) in the pump section (2).
7. Vacuum coating system according to one of claims 1 to 6, characterized in that the connection for power transmission from the drive plane (10) to the transport plane (11) is arranged in the coating section (3, 8) only.